

U. S. DEPARTMENT OF AGRICULTURE

BUREAU OF PLANT INDUSTRY

FIELD NOTES

FORAGE CROP INVESTIGATIONS

INSTRUCTIONS.

In case of a series of row or plat tests it is desirable to have all the constant conditions recorded for future reference. This can be done on the blank pages in the front of the book for all points not covered by the topic headings. In case several sets of experiments are recorded in a single book the conditions governing each may be given by filling in the outlines provided. (See pp. 7-11.) The blank pages may also be used for any additional data which seem desirable, such as the high, low, and mean temperatures, rainfall, date of the last killing frost in the spring, and of the first killing frost in the fall. At the back of the book are blank pages for convenience in making field calculations and temporary notations. Row numbers should be listed in the order that they occur in the field. Records should be made in rate per cent wherever possible and in such manner that the better the variety or strain the higher the percentage recorded. Rules given under "Explanation of heading and abbreviations used" should be followed, in order that the notes on any given crop may be uniform for all the stations.

EXPLANATION OF HEADINGS AND ABBREVIATIONS USED IN TAKING FIELD NOTES IN FORAGE-CROP INVESTIGATIONS.

SIZE OF PLAT.—Stated in fractions of an acre, as $\frac{1}{5}$, $\frac{1}{10}$, etc., or if nursery rows, length of the row in feet.

RATE OF SEEDING.—Pounds per acre.

STAND.—Given in percentages or number of plants in the row.

DATE.—Given in figures, as 9-15 (September 15).

UNIFORMITY.—Given in percentages.

VIGOR.—Strength or abundance of growth: *p.*=poor; *f.*=fair; *g.*=good; *ex.*=excellent.

CONDITION.—If the crop is biennial or perennial, give percentages showing what portion has survived the winter.

FOLIAGE COLOR.—Indicate the shade of green as follows: *g.*=green; *l. g.*=light green; *d. g.*=dark green; *y. g.*=yellowish green; *g. g.*=grayish green; *p. g.*=purplish green. The superlative degree of any of these colors may be indicated by placing *v.* before the color abbreviations, as follows: *v. l. g.*=very light green.

HABIT OF GROWTH.—Described by the following terms: *e.*=erect; *s. e.*=suberect; *d.*=decumbent (prostrate, tip ascending); *p.*=procumbent (trailing); *v.*=vining; *b.*=bushy.

STEMS PER PLANT.—Average number of stems produced from one seed, as 7-8.

MEASUREMENTS.—Given in inches unless otherwise indicated.

DISEASE RESISTANCE.—Give the percentage of noninfection, best determined by estimating the percentage of infection and subtracting this from 100.

DROUGHT RESISTANCE.—Indicate the comparative vigor of plants under conditions of drought, as follows: *p.*=poor; *f.*=fair; *g.*=good; *ex.*=excellent.

LODGING.—Described as *none*, *little*, *medium*, *much*.

SHATTERING.—Described as *none*, *little*, *medium*, *much*.

QUALITY.—Indicated as follows: *p.*=poor; *f.*=fair; *g.*=good; *ex.*=excellent.

ABBREVIATIONS.

GENERAL.—*v.*=very; *med.*=medium; *p.*=poor; *g.*=good; *ex.*=excellent (indicates an unusually high degree, seldom occurring); *l.*=little; *m.*=much; *o*=none or nothing; *lg.*=long; *s.*=short; *sm.*=small; *lrg.*=large; *ab.*=abundant; *few*=few; *cs.*=coarse; *sl.*=slender.

COLOR.—*v.*=violet; *i.*=indigo; *b.*=blue; *g.*=green; *y.*=yellow; *o.*=orange; *r.*=red; *pur.*=purple; *pk.*=pink; *l.*=light (used before a color); *d.*=dark (used before a color).

SHAPE.—*ov.*=oval; *rd.*=round; *obl.*=oblong; *lin.*=linear; *obo.*=obovate; *cor.*=cordate; *cyl.*=cylindrical; *elip.*=elliptical.

Page 2.

Variety _____ Test of *Phaseolus angularis*, 1913

Object _____

Location _____

Kind of soil _____

Character of field _____

Previous crop _____

Preparation of seed bed _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Seeding method _____

Page 32

Variety _____ Test of *P. calcaratus*, 19

Object _____

Location _____

Kind of soil _____

Character of field _____

Previous crop _____

Preparation of seed bed _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Seeding method _____

Variety _____ Test of *P. max* _____, 19/3

Object _____

Location _____

Kind of soil _____

Character of field _____

Previous crop _____

Preparation of seed bed _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Seeding method _____

Variety _____ Test of *P. radiatus* _____, 19

Object _____

Location _____

Kind of soil _____

Character of field _____

Previous crop _____

Preparation of seed bed _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Seeding method _____

Variety _____ Test of Dolichos Lablab, 1913

Object _____

Location _____

Kind of soil _____

Character of field _____

Previous crop _____

Preparation of seed bed _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Seeding method _____

Variety _____ Test of Sorghum, 1913

Object _____

Location _____

Kind of soil _____

Character of field _____

Previous crop _____

Preparation of seed bed _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Seeding method _____

..... Test of, 19.....

Object

Location

Kind of soil

Character of field

Previous crop

Preparation of seed bed

1.

2.

3.

4.

5.

6.

Seeding method

..... Test of, 19.....

Object

Location

Kind of soil

Character of field

Previous crop

Preparation of seed bed

1.

2.

3.

4.

5.

6.

Seeding method

Object _____

Location _____

Kind of soil _____

Character of field _____

Previous crop _____

Preparation of seed bed _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Seeding method _____

Object _____

Location _____

Kind of soil _____

Character of field _____

Previous crop _____

Preparation of seed bed _____

1. _____

2. _____

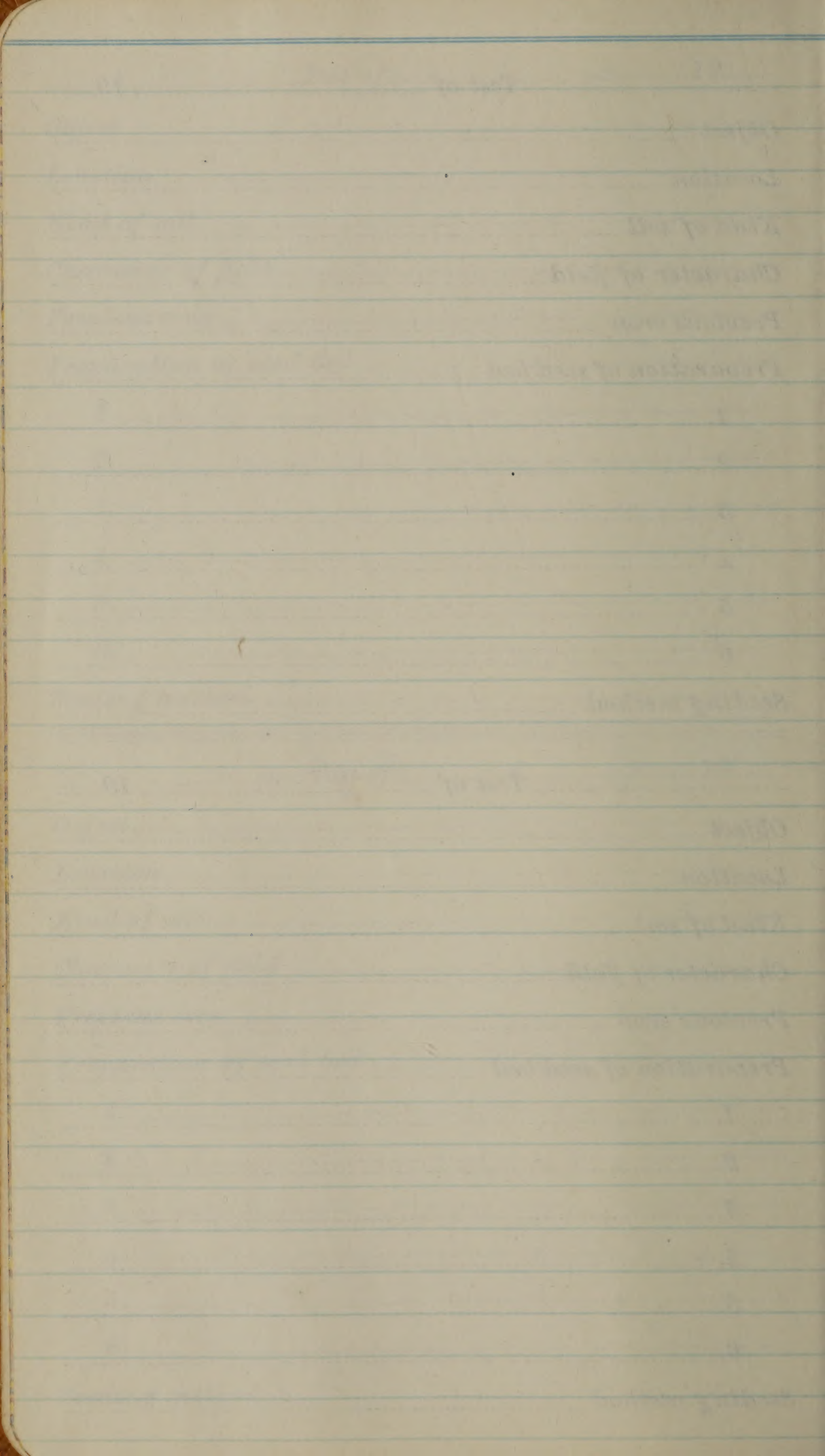
3. _____

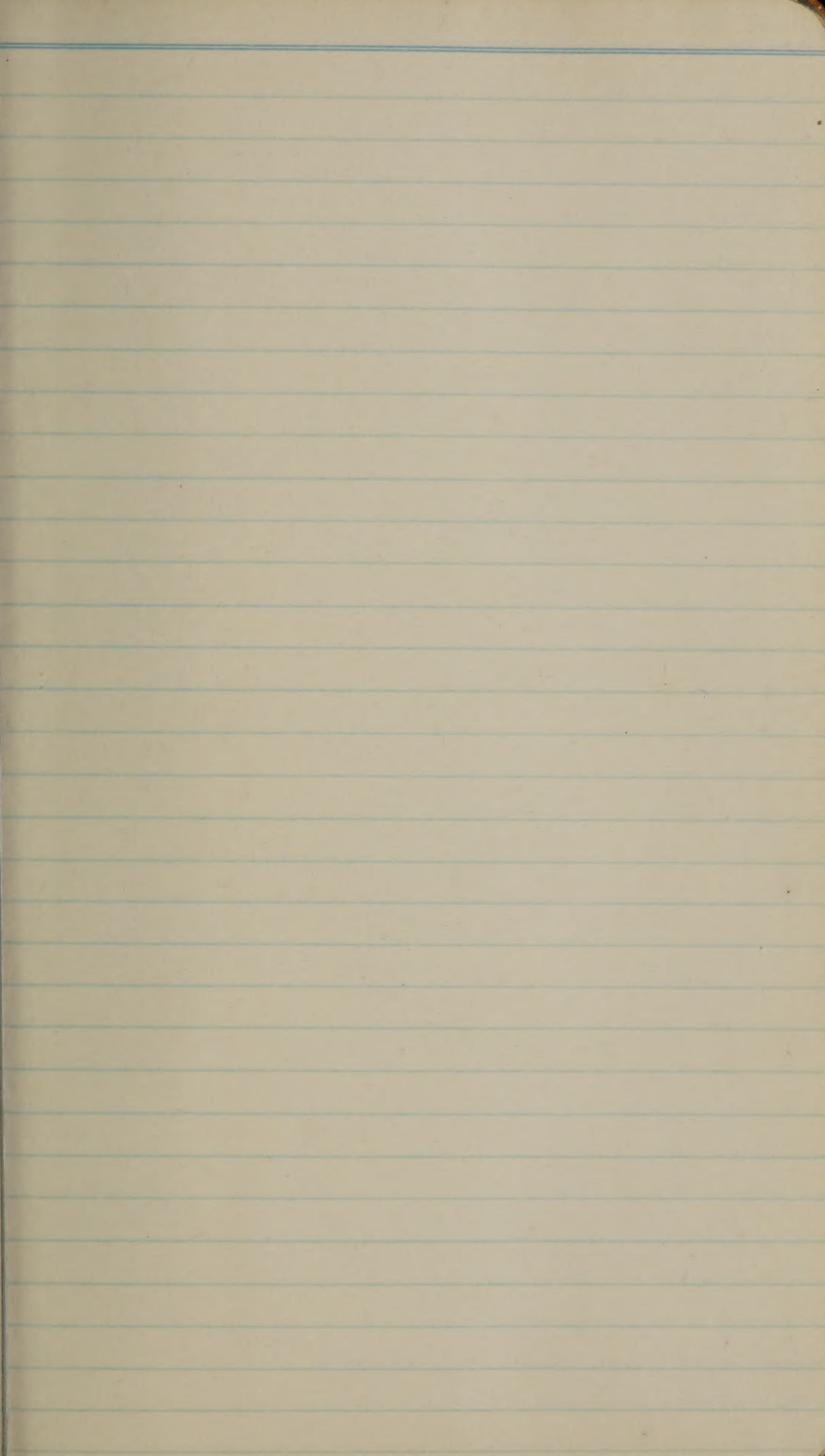
4. _____

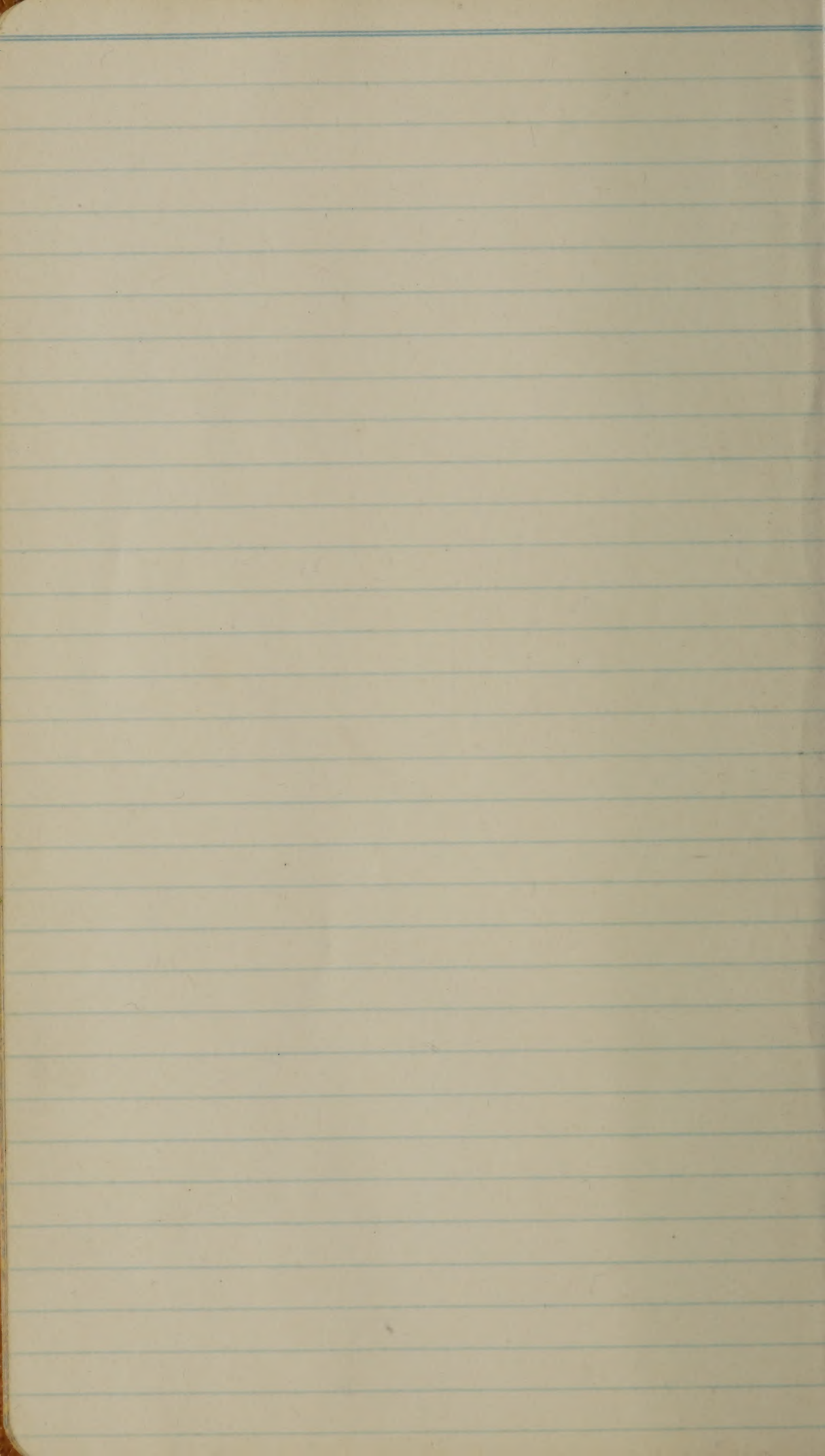
5. _____

6. _____

Seeding method _____







2 Phaseolus angularis

No.	Seed Color	Date Sown	Stand	Bloom	Habit	First Pods mature	Height In
01556 S.B.	Maroon S.P.	6/9/13		9/5-			26
01556A +	Red marbled	6/7/13	96	9/15			22
01864 +	Maroon	6/9/13	81	7/30	B	9/2	14
01864B +	Red flecked	6/9/13	81	8/4		9/5-	14
01989 +	Maroon	6/9/13		8/4	B	9/2	12
01990 +	Maroon	6/7/13		9/2		10/2	22
01993 +	Red flecked	6/7/13					

A11

Pods

seed

Mature Season Length Color No.

In

4

9/24 109 3 1/2 L 9

9/27 109 4 L 10

9/24 109 3 1/2 B 9

10/26 143 4 L 10

Diseases			Branches	
	Red Leaf spot	White Leaf spot	No	Length
Rust				
-	-	L		
-	-	L	-	
-	-	L	-	
-	-	-	-	

- - L

- - L

- - L

- - -

Breadth of Mass	Area	Yield of seed	Bus. cal. per acre	Rank	Row	Stand %
In		OZ	Pms			%
42	1rd	1	.5		1107	
30	1rd	—	—	—	96	
16	1rd	21½	17.9		1'	95
14	1rd	18	15.0		8'	85
12	1rd	15.5	12.9		12	60
24	1rd	26½	22.0		13	

Phaseolus angularis

No.	Seed Color	Sown	Row	Stand	Bloom	Habit	1st pods Mature
10010		6/7/13					
13384+	Orange	✓ 6/7/13	12 ⁵		9/9	21	
10010	S.P.	6/7/13		95	8/21	Vat T	9/27
13387	Straw	✓ 6/7/13	5 ³		9/6	21	
+							
13389	Straw	✓ 6/7/13	14 6 ²		9/5	21	10/8
13389	Straw	6/9/13	107 ⁴		9/17	21	
S.P.							
013391	Maroon	6/7/13	9 ¹		8/4	B	9/2
13391A	Red	✓ 6/7/13	9 ¹	90	8/11	Vat T	9/17
	marbled						
13391C		6/9/13	107 ⁶	98	7/30	B	9/9
S.P.							
13391D		6/9/13	107 ⁵		7/30		9/2
S.P.							
16791	Gray	✓ 6/7/13	8 ⁶	95	8/21	Vat T	9/17
16791	Gray	6/9/13	108 ⁵	98	8/21	Vat T	9/17
S.P.							
17287	Gray	✓ 6/9/13	7 ⁶		8/11		9/9
17287A	Red	✓ 6/7/13	10 ⁷	90	8/4	B	9/5
17315	marbled						
17317A	Black	✓ 6/7/13	8 ⁵	85	8/21	B	9/14
17317B	Black	✓ 6/7/13	6 ²		8/25		10/1
	blotched						
17319	Maroon	✓ 6/7/13	1 ⁵		8/4	B	9/2
17319C	black	6/9/13	100 ⁶	98	8/11		9/15
S.P.	blotched						
17321	Straw	✓ 6/7/13	7 ³		9/2		
17321	Straw	6/9/13	107 ³		9/5		
S.P.							
17323	Straw	✓ 6/7/13	8 ³	75	8/26	B	10/1
17323A	Gray	✓ 6/7/13	6 ⁶		8/21		9/27

All pods Poles No. of
Mature Height season Length Color seed

	In.	Days	In		
10/15	20	161	3.5	-	9
10/23	20	138	3.5	Bz	10
	22				
	20		3.5	L	9
	28				
9/24	18	109	3 1/2	L.D.	9
10/14	24	129	4	L	10
10/14	42	129	3.5	Bz	10
10/1	20	114			
10/14	20	129	3.5	L, D	10
10/14	24	129	3.5	D	9
10/1	18	114		L	
9/17	20	102	3.75	L	7
10/14	20	129	3.5	Bz	9
10/28	18	143	4	L	8
9/17	14	102	3 1/2	L	8
10/1	18	114	3.5	D	9
10/23	22	136			
10/23	26	138	3.5	L	10
10/27	16	144	3.5	L	8
10/26	20	145	3.5	DG	10

Diseases		Branches			
	Red	White			
Rust	Leaf-spot	Leaf-spot	No.	Length	
-	L	-	-	-	-
-	L	-	-	-	-
-	L	-	-	-	-
-	L	-	-	-	-
-	Me	-	-	-	-
-	L	-	-	-	-
-	L	-	-	-	-
-	M	-	-	-	-
-	L	-	-	-	-
-	M	M	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	L	-	-	-	-

Breadth of	Mass	Area	Seed Yield	Cal. bus. per acre	Rank	Stand	Uniform
In.	1rd.	02					
24	1rd	1/2	25				
34	1rd	3 1/2	26.2			yes	
30	1rd	7 1/2	6.25				
24	1rd	—	—				
24	1rd	1 1/2	1.25				
18	1rd.	21.5	10.8			95	
30	2rds	86	35.8				
24	1rd	35	29.1			yes	
24	1rd	30	25.0				
30	1rd	41	36.1			no	
36	1rd	52	43.3			yes	
18	1rd	24	20.0				
22	2rds	57	23.7			yes	
24	1rd	33	27.5				
16	1rd	6	5.0				
12	1rd	12	10.0			90	
24	1rd	31	25.8				
24	1rd	10	8.3				
36	1rd	3	2.5			85	
18	1rd	12 1/2	8.8			no	
30	1rd.	44	36.7				

No.	Seed Color	Sown	Row	Stand	Bloom	Habit	1st. pods mature
17324A	Black blotched	✓ 6/7/13			8/21		
17324A S.P.	Black blotched	6/9/13	108 ⁸	98	8/21	Vat T	
17324A	Black blotched	6/7/13	72		8/21		9/27
17324A	Black blotched	(1) 6/7/13	131		—	—	—
		(2) 6/7/13	53		—	—	—
17324B	Red marbled	✓ 6/7/13	10 ⁶	86	8/14	B	9/17
17324C	Black blotched	✓ 6/7/13	82		8/21		9/27
17324D S.P.		6/9/13	108 ³	98	8/26	Vat T	10/1
17324E S.P.		6/9/13	108 ²	98	8/21	B	9/27
17847	Straw	✓ 6/7/13	93	95	8/14	B	9/15
17847	Straw	(1) 6/7/13	18				
		(2) 6/7/13	63				
17847A S.P.		1 6/9/13	109 ⁷	98	8/14	Vat T	9/17
17851		(1) 6/7/13	23				
		(2) 6/7/13	68				
17851A	Black	✓ 6/7/13	95	75	8/4	B	9/17
17851B	Black blotched	✓ 6/7/13	9 ²	90	8/21	B	9/15
18618A	Gray	✓ 6/7/13	56		8/26		10/1
19185	Straw	✓ 6/7/13	10 ³		8/11		9/9
19185 S.P.	Straw	6/9/13	107 ²	98	7/30		9/5
19185	Straw	(1) 6/7/13	28				
		(2) 6/7/13	93				
19185B	Straw	✓ 6/7/13	11 ³	95	8/14	B	9/24
19988	Maroon	✓ 6/7/13	1 ⁶		7/30		8/30

all
note

Po L S

Uo. 08

mature Height Season Length Color seed

In Pas

10/23 26 136 4 L 10

10/28 18 143 3.5 L 8

— — — — —

— — — — —

10/14 20 129 3.5 Br 8

10/28 24 143 3.5 Br 8

10/23 24 136 3.5 L Br 9

10/14 20 127 3 Br 8

10/14 22 129 3 L 10

10/14 22 127 3 Br 8

10/14 18 129 3 Br 6

10/14 18 129 3.5 L 9

10/28 20 143 4 L 9

9/27 18 112 3.75 L 9

10/1 24 114 3.75 L 9

10/14 16 129 3 Br 9

9/15 14 100 4 D 10

Disease Branches

Rust ^{Leafspot} Red White No. Length

- - - - -

- - - - -

- L - - -

- L L - -

- L - - -

- - - - -

- L - - -

- - - - -

- - - - -

- L L - -

- L L - -

- Mo Me - - -

- L L - - -

Breadth mass Area	Seed yield	Cal. one per acre	Rank	Stand No	Amph
	02			20	
1rd	19	15.8			
36 1rd	44	36.7			yes
18 1rd	19	15.8			
1/20 A	49	16.3			
1/10 A	133	22.1			
24 1rd	21	17.5			No
22 1rd	33	27.5			
30 1rd	31	25.8			yes
30 1rd	42	35.0			yes
24 1rd	33	27.5			yes
1/20	78	26.0			
1/20	76	25.3			
24 1rd	37	30.8			yes
1/20 A	88	29.3			
1/20 A	100	33.3			
24 1rd	28	23.3			yes
20 1rd	22	18.3			yes
34 1rd	23 1/2	19.6			
20 1rd	33	27.5			
24 1rd	30	25.0			
1/20 A					
1/20 A					
16 1rd	25	20.8			yes
12 1rd	9	7.5		95	

No	Seed Color	down	Row	Stand No	Bloom	Habit	1st. pods mature
19988 S.P.	Maroon	6/9/13	110 ²	95	8/11		9/2
19988A	Maroon	✓ 6/7/13	17	98	8/4		8/30
19988E S.P.	Straw	6/9/13	109 ³	95	8/11	B	9/15
19988F S.P.	S.P.	6/9/13	107 ¹	98	7/30	B	9/5
20008A	Red blotched	✓ 6/7/13	9 ¹	75	8/21		10/1
20009	Straw	✓ 6/7/13	12 ³	85	8/21	B	9/27
20010	Black blotched	6/7/13	57	80	8/26	VAT	9/27
20010 S.P.	Black blotched	6/9/13	108 ⁴		8/21		
20010A S.P.		6/9/13	108 ¹	95	8/21	B	9/17
20010B S.P.		6/9/13	108 ¹	95	8/21	VAT	9/27
20402	Straw	✓ 6/7/13	54	95	8/4		9/2
20403 S.P.		6/9/13	108 ⁶		8/11		9/5
20403		✓ 6/7/13	6 ⁷	30	7/30		8/26
20408	Gray	6/7/13					
21081	Straw	✓ 6/7/13	6 ⁴		8/11		9/5
21081 S.P.	Straw	6/9/13	109 ²		8/11		9/5
21081C S.P.		6/9/13	109 ⁵	98	8/11	B	9/5
21082	Maroon	6/7/13					
21082 S.P.	Maroon	6/9/13	110 ⁵	98	8/14		9/15
21082	Maroon	(1) 6/7/13	33				
		(2) 6/7/13	73				

All pods	Season	Pods			
		Height	Length	Color	seed
		In	In		
9/15	98	20	4.	L	9
9/15	100	14	4.	D	6
10/14	127	24	3.5	Br	9
10/2	115	26	3	D; Br	8
10/30	145	18	4	Br	9
10/14	129	20	3.5	Br	9
10/14	129	20	3.5	Br	8
		20			
10/14	127	24	3.5	L	9
10/14	127	20	3.5	Br	8
9/17	102	16	3.5	L	9
9/17	100	16	3.25	Br	8
9/15	100	12	3.25	Br	8
10/1	116	18			
9/20	103	22	4	L	9
9/22	105	20	4	L	10
10/1	114	18	3.5	L	8

Disease Branches
 Rust ^{Seaprot} Red white No. Length

— M — — — —

— L L — — —

— L + — — —

— L — — — —

— — — — —

— L — — — —

— L — — — —

— L — — — —

— L L — — —

— L L — — —

— M — — — —

— L — — — —

— M — — — —

— M — — — —

— L — — — —

Breadth mass	Area	Seed yield	Cal. 300 per acre	Rank	Uniform
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In.	83
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24	1rd	24 1/2	20.4		Yes
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12	1rd	11.5	9.6		yes
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26	1rd	44	36.7		yes
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30	1rd.				no.
----	------	--	--	--	-----

18	1rd	14	11.6		yes
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18	1rd	23.5	19.5		yes
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30	1rd	25	20.8		
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28	1rd				
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30	1rd	20	16.7		yes
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30	1rd	35 1/2	29.6		yes
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18	1rd.	33	27.5		
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18	1rd	8	6.7		
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14	1rd	29 1/2	24.6		
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22	1rd.	38			
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24	1rd	28			
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24	1rd.	44			
----	------	----	--	--	--

24	1rd	33			
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1/20 A	71	23.6
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1/20 A	65	21.6
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No.	Seed Color	down	Row	stand	Bloom	Habit	1st. pods mature
21083	Maroon	✓	6/7/13	2'		7/30 B	9/2
21083	Maroon	(1) ✓	6/7/13	38			
		(2) ✓	6/7/13	78			
21083 S.P.	Maroon		6/9/13	110 ⁴	98	8/11	9/7
21083A	Brown	✓	6/7/13	7'		7/30	9/5
21083B		✓	6/7/13	2 ²		7/30	9/15
21083C S.P.	Maroon	✓	6/9/13	2 ²		7/30	9/2
21084	Red	✓	6/7/13	10'	90	8/11	9/9
	blotched						
21084 S.P.	Red		6/9/13	110 ³		8/11	9/9
	blotched						
21084A	Brown	✓	6/9/13	6'		8/14	9/5
21084A	Brown		6/9/13	109'	98	8/14	9/5
21084 S.P.							
21084A	Brown		6/9/13	109 ⁵	98	8/11 B	9/5
	S.P.						
21084C S.P.				110 ⁵	98	8/11	9/5
21824	Maroon	✓	6/7/13	2 ⁴		7/30	9/2
22382	Maroon	✓	6/7/13	8 ¹		8/14 B	9/5
22383	Maroon	✓	6/7	2 ⁵		9/9	
22410	Maroon	✓	6/7/13	2 ⁷	75	8/6 B	9/15
22410	Maroon	✓	6/7/13	2 ⁶		8/11	9/15
22509	Straw	✓	6/7/13	7 ⁴	98	8/11	9/7
23210B	Red		6/7/13	11 ⁶		9/2	
	marbled						
25139	Maroon	✓	6/7/13	2 ⁸		9/5	10/5

All
Pods

Pods no. 8

mature Season Height Length Color seed

9/27 112 12 3 1/4 L 8

10/1 114 20 3.5 Br. 8

10/28 143 16 3.5 Br. 8

10/28 143 20 3.5 D Gn 8

9/17 100 14 3 1/2 L 8

9/27 112 14 4. (D) L 7

9/27 110 18 4. L 7

9/27 110 16 3.75 Br 8

9/23 106 20 3.75 Br 8

9/20 103 20 3.25 L 8

10/1 114 18 3.5 D 9

9/17 102 18 3 1/2 D. 8

9/27 112 14 3 L 8

10/6 161 28 4 L 9

10/1 116 18 3 Br 7

10/1 116 18

10/1 116 16 3 1/2 L

24

11/15 161
Har. 24 4.5 Br 10

Disease Branches
 Rust ^{Leafspot} Red White No. Length

-	L	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	L	-	-	-	-
-	-	L	-	-	-
-	M	-	-	-	-
-	M	L	-	-	-
-	M	M	-	-	-
-	L	-	-	-	-
-	L	-	-	-	-
-	-	L	-	-	-
-	L	-	-	-	-
-	L	-	-	-	-

Breadth
3 mass Area yield Cal.
dus
per
acre Rank Stand Uniform

In. 02
18 1rd 24

$\frac{1}{20}$ A 55 18.3

$\frac{1}{20}$ A 59 19.6

18 1rd 28

18 1rd 22

No

24 1rd 40

No

16 1rd 20

No

14 1rd 18

20 1rd 23

Yes

18 1rd 37

18 1rd 30

24 1rd 37

22 1rd 35

14 1rd 24

90

12 1rd 6

40

30 1rd $\frac{1}{2}$

20 1rd 26

20 1rd 25.5

18 1rd $26\frac{1}{2}$

8

26 1rd

20 1rd 1.5

22 Phaseolus angularis

No	Seed Color	Surv	Row	Stand No	Flower	Habit	1st. fruits mature
25141	Gray	✓	6/7/13	77	50	9/5	ml
25255	White	✓	6/7/13	55		8/11	85 9/24
25255 S.P.	White		6/9/13	109 ⁴	98	8/11	ml 9/15
25255	White	(1)	6/7/13	48		8/11	ml
		(2)	6/7/13	88			
25255C S.P.	Brown		6/9/13	109 ⁶	98	8/14	var. T 9/15
25916	Maroon	✓	6/7/13	31		9/5	ml
25916A	Straw	✓	6/7/13	84		9/5	
25916A S.P.	Straw		6/9/13	110 ¹		9/9	ml
25916B S.P.			6/9/13	107 ⁸		9/5	ml
25916C S.P.			6/9/13	107 ¹		9/5	ml
28052	Maroon	✓	6/7/13	32		8/11	B 9/15
28052	Maroon	(1)	6/7/13	43			ml
		(2)	6/7/13	83			
32364	Maroon	✓	6/7/13	33		9/5	ml
34416	Gray	✓	6/7/13	68		8/14	B 9/5
34643	Maroon	✓	6/7/13	34	95	8/30	ml 10/1
34644	White	✓	6/7/13	65		8/14	9/5
34700	Maroon	✓	6/7/13	35	90	8/26	var. T 10/1
34701	Gray	✓	6/7/13	78		8/25	var. T 10/1
34812	Maroon	✓	6/7/13	36	98	7/30	B 8/30
34813	Straw	✓	6/7/13	94		9/5	ml 10/10

All pods mature Season Height Length Color seed

		In.	In.		
11/15	Har.	24	4 1/2	Br	10
10/25	143	20	3.5	L	9
10/25	141	26	3.5	L	10
10/23	106	28	4	Br	9
		26			
		24			
		26			
		24			
		24			
10/1	106	16			
		24			
9/27	112	16	3.5	Br	8
10/25	143	26	5	L	9
9/24	109	16			
10/25	143	18	3	L	9
10/25	143	20	3.5	L	9
9/17	102	20	3 3/4	D	9
		30			

Disease Branches

Rust	Leaf-spot	Red	White	No.	Length
-	-	-	-	-	-
-	-	L	-	-	-
-	L	-	-	-	-
+	L	L	-	-	-
-	-	-	-	-	-
-	L	-	-	-	-
-	L	-	-	-	-
-	M	-	-	-	-

Breadth of mass	Area	seed yield	Cal. bus. per acre	Rank	Stand
In:		02			
24	1rd	1/2			
28	1rd	26			
36	1rd	38 1/2			yes
	1/20 A	23	7.6		
	1/20 A	40	13.3		
36	1rd	46	1"		yes
36	1rd	10			
36	1rd	11			
40	1rd	7 1/2			
36	1rd	7			
36	1rd	2			
20	1rd	29.5			
	1/20 acre	78	26.0		
	1/20 acre	70	23.3		
30	1rd	11			
20	1rd	29			
30	1rd				No
24	1rd	44 39			
30	1rd	30			yes
36	1rd	46			
16	1rd	20 1/2			
40	1rd	32			

Phaseolus angularis

No	Seed	Color	form	Row	Stand	Bloom	Habit	mature	1st. pods
34814	Maroon	✓	6/7/13	37		8/4	B	9/2	
34815	Maroon	✓	6/7/13	3 ⁸		9/9		10/16	
34816	Red marbled	✓	6/7/13	12 ⁶		9/5		10/20	
34948	Maroon	✓	6/7/13	4 ¹		7/30		8/30	
34949	Maroon	✓	6/7/13	4 ²		7/30	B	9/2	
34950	Maroon	✓	6/7/13	4 ³		7/28	B	8/19	
34951	Maroon	✓	6/7/13	4 ⁴		7/28	B	8/30	
34952	Maroon	✓	6/7/13	4 ⁵		8/4	B	9/2	
34953	White	✓	6/7/13	7 ⁵	98	8/11		9/2	
34954	Straw	✓	6/7/13	10 ⁴	98	8/11		9/5	
34955	Straw	✓	6/7/13	11 ⁴	90	8/11		9/5	
34956	Straw	✓	6/7/13	12 ⁴	95	8/11		9/5	
34957	Greenish	✓	6/7/13	10 ²	98	8/11		9/9	
34958	Red	✓	6/7/13	11 ⁷		8/19		9/9	
34959	Red marbled	✓	6/7/13	11 ⁸	98	8/11		9/5	
34960	Black marbled	✓	6/7/13	10 ⁵	90	8/11		9/5	
34961	Black	✓	6/7/13	11 ⁵	90	8/4		9/2	
34962	Gray	✓	6/7/13	8 ⁷	65	8/11	B	9/9	
34963	Red blotched	✓	6/7/13	11 ¹	95	8/4		9/2	
34964	Gray	✓	6/7/13	8 ⁸	98	8/4	B	9/5	

All ³ pods us. ₃ seed

mature	Season	Height In.	Length In.	Color	seed
9/24	109	20	4	L	10
		28		S	
10/1		26			
9/17	102	18	4	D	8
9/17	102	18	3.75	D	10
9/17	102	12	3.5	Br	8
9/17	102	20	4	D	10
9/17	102	18	4	L	8
9/17	102	12	3.5	L	9
9/27	112	18	3.5	L	8
9/20	105	18	3.75	L	10
9/20	105	20	4	D	10
9/27	112	24	3.75	D	8
9/27	112	22	4	L	10
9/20	105	20	3.5	L	8
9/15	100	12	3.5	Br	9
9/15	100	14	3.5	Br	10
9/27	112	20	3.5	L	7
9/20	105	10	2.5	L	8
9/17	102	14	3.5	Br	10

Disease Branches
^{leafspot}
 Rust Red white No. Length

- L - - -

- + L - -

- L L - - -

- M - - -

- L L - - -

- M - - -

- L M - - -

- - M - - -

- L L - - -

- M - - -

- L - - -

- - M - - -

- - M - - -

- - M - - -

- M L - - -

- L - - -

- M - - -

- M - - -

Breadth of mass	Area	Seed yield	Cal. bus. per acre	Rank	Score
In.		OZ			20
18	1rd	20			98
20	1rd	4½			
42	1rd	12½			
16	1rd	29.5			98
14	1rd	27			98
12	1rd	13			90
18	1rd	26			98
20	1rd	32			98
14	1rd	24			
20	1rd	33			
16	1rd	24			
20	1rd	25			
28	1rd	37			
24	1rd	30			
18	1rd	27			
12	1rd	20			
12	1rd	21			
18	1rd	20			
12	1rd	14			
20	1rd	34½			

No.	Seed Color	✓	Sown	Row	Stand	Bloom	Habit	1st node mature
34965	Greenish	✓	6/7/13	11 ²		8/11	✓	9/15
34966	Red	✓	6/7/13	12 ¹	95	8/4	✓	9/2
	Blotched							
34967	Maroon	✓	6/7/13	4 ⁶		7/30	B	8/25
34968	Maroon	✓	6/7/13	4 ⁷		7/28	Vatifo	8/19
34969	Maroon	✓	6/7/13	4 ⁸		8/4	✓	9/5
35216	Maroon	✓	6/7/13	5 ¹		8/11	✓	9/9
35217	Maroon	✓	6/7/13	5 ²	50	8/19	B	9/27
35218	Gray	✓	6/7/13	5 ⁸		8/11	✓	9/15
35219	Black	✓	6/7/13	12 ⁵	98	7/30	✓	9/2
35220	Red	✓	6/7/13	12 ⁷		8/11	✓	9/9
	marbled							
35221	Greenish	✓	6/7/13	12 ²	98	8/11	✓	9/9

All frogs	mature season	Poles			no. B seed
		Height In.	Length In.	Color In.	
10/1	116	16	3.5	Br	10
9/15	100	18	4.	D	10
9/17	102	16	3.5	L	9
9/17	102	14	2.5	D	9
9/27	112	16	3.5	Br.	8
10/1	116	22		Br	
10/26	143	12	4	B	8
10/1	116	24			
9/15	100	14	3.5	Br	8
9/27	112	24	3.75	L: Br D	9
10/1	116	22	4.	Br	9

Disease			Branches	
Rust	Leafspot	White	No.	Length
—	L	—	—	—
—	L	L	—	—
—	M	L	—	—
—	me	—	—	—
—	L	—	—	—
—	—	L	—	—
—	—	—	—	—

Breadth of mass	Area	seed yield	Cal. mus. per acre	Rank	Land	Uniform
In		02			020	
16	1rd	22				
12	1rd	16				
16	1rd	20			95	
12	1rd	14			98	
16	1rd	12.5			90	
28	1rd	43				
12	1rd	7				yes
24	1rd	23 $\frac{1}{2}$				
16	1rd	25				
26	1rd	35			No	No
24	1rd	30				

Page 9

100

100

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100

100

100

100

100

100

100

No.	Seed	Color	Sum	Row	Stand	Habit	Bloom	1st. pods mature
			6/9/13					
01555			6/9/13	105 ²			8/30	
01977			6/9/13	104 ¹				
01978			6/9/13	106 ³			9/15	
13381			6/9/13	105 ¹	98	✓	8/30	
13382			6/9/13	104 ⁴	98	✓	8/30	
13383			6/9/13	105 ²	98	✓	8/30	
17850			6/9/13	106 ¹	98	✓	8/11	9/15
25142			6/9/13	105 ⁴	98	✓	8/30	
25143			6/9/13	104 ²	98	✓	8/21	
25523			6/9/13	104 ³	90	✓	8/11	9/25
31728			6/9/13	105 ³				

11/12
 pods
 mature / Height Season Length Color seed

10/26 48 4.0 130 10

10/26 48 4.0 D 8

10/26 48 4.0 D 9

10/26 48 4.0 D 11

10/7 36 3.5 D 8

10/26 48 4.0 D 9

10/20 48 3.75 B 10

10/19 36 3.00 D 9

Disease		Branches	
Leafspot			
Rust	Red white	No.	Length

Breadth of mass	Area	Seed yield	Cal. ins. per acre	Rank
-----------------------	------	---------------	-----------------------------	------

		02		
36	2 rds	13		

2 rds

4 rds

42	2 rds	25		
----	-------	----	--	--

36	2 rds	29		
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36	2 rds	12		
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36	2 rds	36		
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36	2 rds	18		
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36	2 rds	35		
----	-------	----	--	--

30	2 rds	17		
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2 rds

21

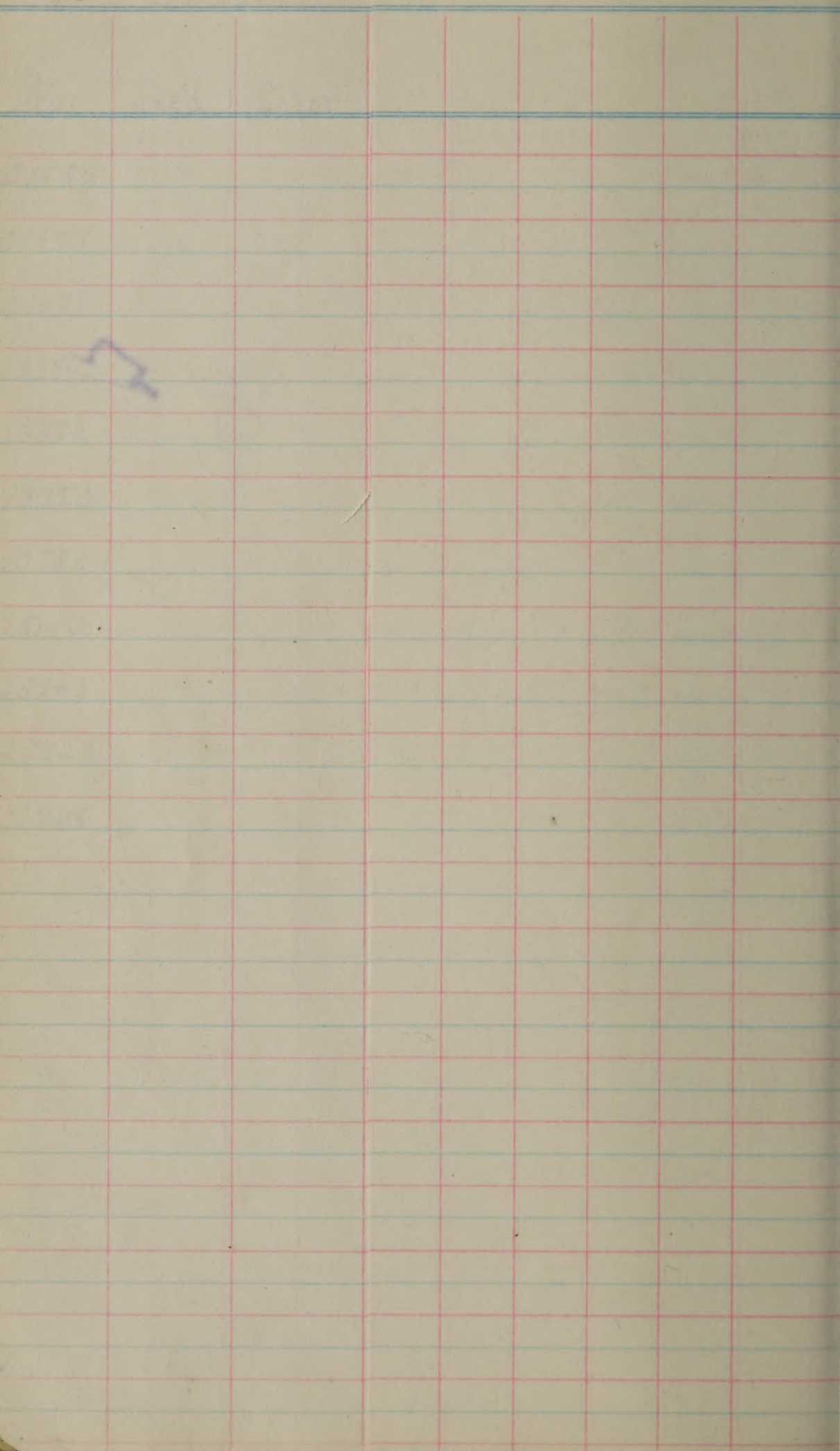
31

31

30

28

141



Phaseolus radiatus

No	Seed	Color	Sown	Row	Stand	Bloom	Habit	1st. pods mature
01557			6/9/13	98 ¹		8/6		9/2
01573			6/9/13	98 ²	95	8/6		9/5-
01574			6/9/13	98 ³		8/14		9/20
01577			6/9/13	98 ⁴	95	8/11	Vetty	9/20-
01557			6/9/13	98 ⁵	95	8/11	VAT	9/2
01626			6/9/13	98 ⁶	95	8/11	VAT	9/5-
01627			6/9/13	98 ⁷	95	8/14		9/5-
01991								
10527			6/9/13	98 ⁸	98	8/14		9/9
17096			6/9/13	99 ¹	98	9/15	B	10/26
17283			6/9/13	99 ²	95	8/2		8/30
17284			6/9/13	99 ³	98	8/4		8/30
17294A			6/9/13	99 ⁴	95	8/2		8/30
17304			6/9/13	99 ⁵	95	8/14		9/9
17848			6/9/13	99 ⁶		8/11		9/5-
21787			6/9/13	99 ⁷		8/11		9/2
24813			6/9/13	99 ⁸	98	8/11		9/5-
26361			6/9/13	100 ¹	98	8/4		9/2
26361A			6/9/13	100 ³	98	8/2		9/5-
28053			6/9/13	100 ⁴	98	8/2		8/30
28993 } 99 }			6/9/13	100 ⁵		8/11		9/5-
29445			6/9/13					
30732			6/9/13					
30732			6/9/13	100 ⁶	95	9/15		No Pods

all
mature

Fods

no. 3

Season Height Length No. seed

9/24 107

9/20 103 18 3. Bl 12

10/23 136 36 3.5 Bl. 12

9/24 107 18 2.75 Bl 12

9/24 107 24 2.5 Dr 12

9/24 107 30 2.5 Dr 12

9/20 103 18 3 Br 13

— 42 3 very 6

— 42 3 very 6

9/20 103 18 3. Bl 12

18 3.75 Bl 13

20 2.75 Bl 10

9/15 98 16 2.75 Br 12

9/20 103 20 2.5 Br 10

9/20 103 16 2.75 Bl 12

18 2.75 Bl 10

9/20 103 16 3. Br 11

9/15 98 14 2.5 Br 10

42

42

Disease			Branches	
Rust	Seaspot Red	White	No.	Length

—	Much	—	—	—
---	------	---	---	---

—	—	—	—	—
---	---	---	---	---

—	—	—	—	—
---	---	---	---	---

—	—	—	—	—
---	---	---	---	---

—	—	—	—	—
---	---	---	---	---

—	Much	—	—	—
---	------	---	---	---

—	—	—	—	—
---	---	---	---	---

—	Much	—	—	—
---	------	---	---	---

—	Much	—	—	—
---	------	---	---	---

—	—	—	—	—
---	---	---	---	---

—	Much	—	—	—
---	------	---	---	---

—	Much	—	—	—
---	------	---	---	---

—	Much	—	—	—
---	------	---	---	---

—	Much	—	—	—
---	------	---	---	---

—	Much	—	—	—
---	------	---	---	---

—	Much	—	—	—
---	------	---	---	---

—	Much	—	—	—
---	------	---	---	---

Breadth of mass	Area	Seed yield	Cal. bus. per acre	Bank
-----------------------	------	---------------	-----------------------------	------

1rd 02

28 1rd 12 10.

1rd 6 5.

— 1rd 6 5.

1rd 14 11.7

26 1rd 3 2.5

30 1rd 6 5.0

26 1rd 12 10.0

24 1rd 6 5.0

18 1rd — —

only a few pods

28 1rd 12 10.0

30 1rd 10 8.3

22 1rd 11 9.2

26 1rd 4 1/2 3.7

1rd 9 7.5

1rd 8 6.7

18 1rd 7 5.8

28 2rd 28 11.7

28 1rd 9 7.5

16 1rd 10 8.3

26 1rd. 9 7.5

1rd

Phaseolus radiatus

No.	Seed Color	Sown	Row	Stand	Bloom	Habit	1st. pods mature.
30733		6/9/13	1007		8/30		9/25
30748		6/9/13	1011	95	7/28		8/26
32363		6/9/13	1012	95	8/19		9/9
32608		6/9/13	1013	95	8/21		9/15
34776		6/9/13	1014	95	8/30		9/27

all nodes	mature	Season	Height In	Length In	Pods	
					No. No.	No. of seed
10/28	141	36	3	8	13	
9/20	103	18	3	8	12	
10/28	141	36	3	0	12	
10/28	141	30	2.5	8	14	
10/28	141	36	3.5	8	12	

Disease Branches
 Rust Red White No. Length

— — — — 171 —

— Much — — 501 —

— — — — 171 —

— — — — 171 —

— — — — 171 —

Breadth of mass	Area	Seed yield	Cal. dus. per acre	Rank	
		02			
18	2 rds				Very few pods
28	2 rds	28			
	2 rds	12			
	2 rds	3			Not very prolific
	2 rds	1			Not very many pods

57

Phaseolus max.

1st. prod.

No.	Seed	Color	Sown	Stand	Row	Plom	Habit	mature
-----	------	-------	------	-------	-----	------	-------	--------

17306			6/9/13	98	102'	7/28		8/30
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17306A			6/9/13	95	102 ³	7/30		9/9
--------	--	--	--------	----	------------------	------	--	-----

17308			6/9/13	95	102 ²	8/17		9/15
-------	--	--	--------	----	------------------	------	--	------

21708			6/9/13		102 ⁴			
-------	--	--	--------	--	------------------	--	--	--

21790			6/9/13		103 ¹			
-------	--	--	--------	--	------------------	--	--	--

25705			6/9/13		103 ²	8/4		9/15
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32607			6/9/13		103 ³	9/15		
-------	--	--	--------	--	------------------	------	--	--

all
pods

mature	Season	Height In	Color No.	Length In	Seed No.
--------	--------	--------------	--------------	--------------	-------------

9/17		10	D.L	2	8
------	--	----	-----	---	---

10/2		24	D	2.25	8
------	--	----	---	------	---

10/2		36	D	2.25	8
------	--	----	---	------	---

10/2		36	D	2.25	7
------	--	----	---	------	---

Breadth
 3
 moss Area seed
 yield Cal.
 bus.
 per
 acre Rank Uniform

82

12 2 rds 21 4.7

No. Bl. & Gr. seed 0-B.

30 2 rds 46 19.2

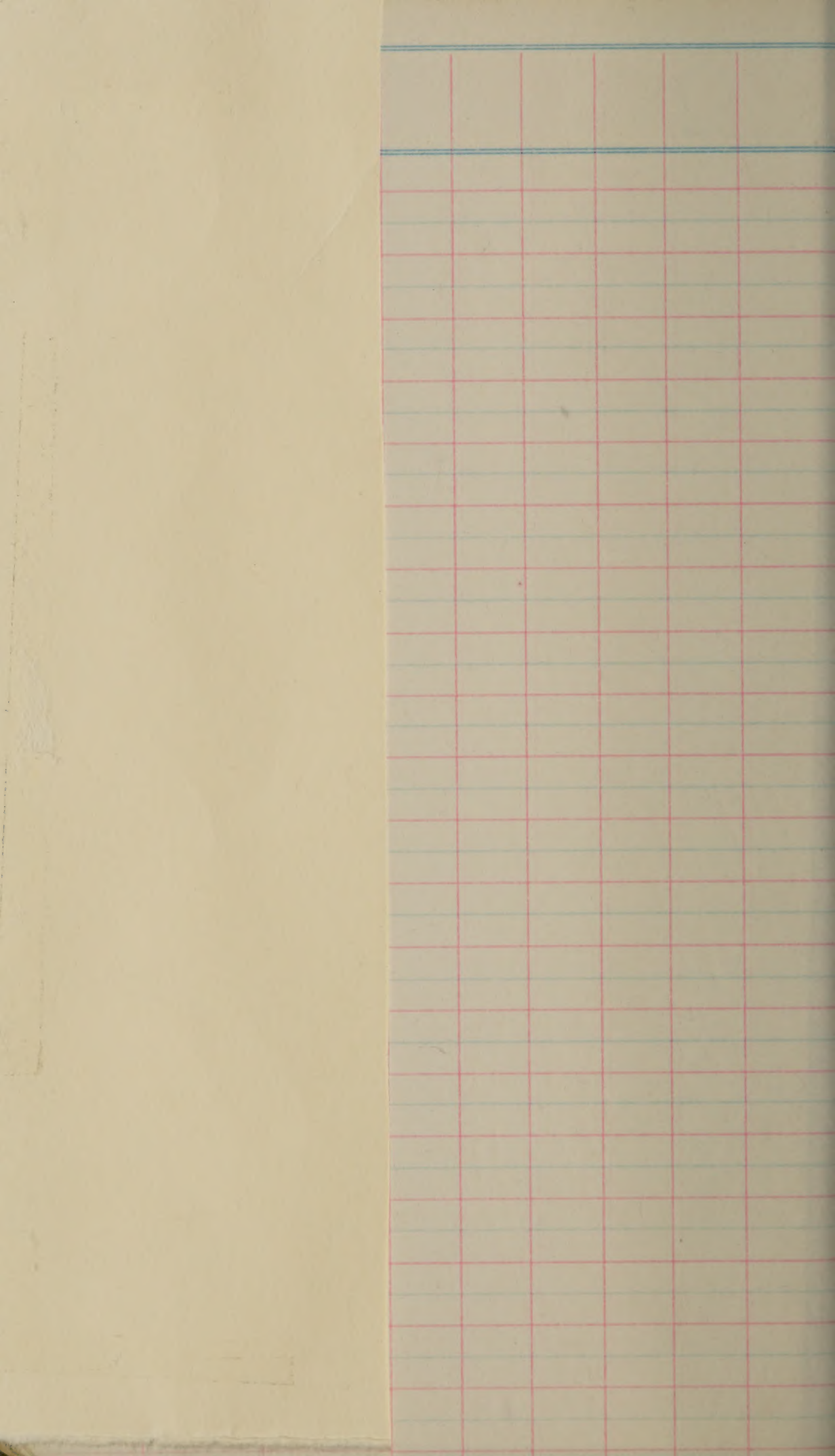
30 2 rds 43 17.9

2 rds — —

2 rds — —

30 4 rds 92 19.2

2 rds — —



	21	1000	42257
	41	1000	42258
	21	1000	42259
	1	1000	42260
	5	1000	42261
	25	1000	42262
	75	1000	42263
	45	1000	42264
	3	1000	42265
0	25	1000	42266
	71	1000	42267
	71	1000	42268
	4	1000	42269
	2	1000	42270
	6	1000	42271
	95	1000	42272
9	62	1000	42273
	71	1000	42274
	05	1000	42275
	18	1000	42276

Dolichos lablab

No	Seed Color	Sown	Row	Stand	<u>Bloom</u>		Habit
					Date	Color	
8355✓		6/18/13	15		8/19	P	
8355C✓		6/18/13	14		8/21	W	
8356✓		6/18/13	16		8/17	P	
8686✓	White	6/18/13	1		8/21	W	
17357✓	White	6/18/13	2		8/21	W	
17534✓		6/18/13	26		8/5	P	
17834✓		6/18/13	27		8/5	P	
17884✓		6/18/13	34		8/11	P	
21998✓	White	6/18/13	3		8/21	W	
22025✓		6/18/13	28		8/26	P	
25132✓		6/18/13	17		8/5	P	
25132✓		6/18/13	18		8		
25156✓	White	6/18/13	4		8/17	W	
25157✓	White	6/18/13	5		8/19	W	
25158✓	White	6/18/13	6		8/5	W	
25159✓		6/18/13	29		8/5	W	
25160✓		6/18/13	30		8/27	P	
25468✓		6/18/13	19				
25648							
26358✓		6/18/13	20		8/19	white	
26358✓		6/18/13	31		8/26	white	

1st node	all nodes	Pods		No. B
mature	mature	Season	Color	No. seed

9/24

9/17

9/17

9/17

9/17

[illegible]

Hay Yield
caliper
Actual acre Bank

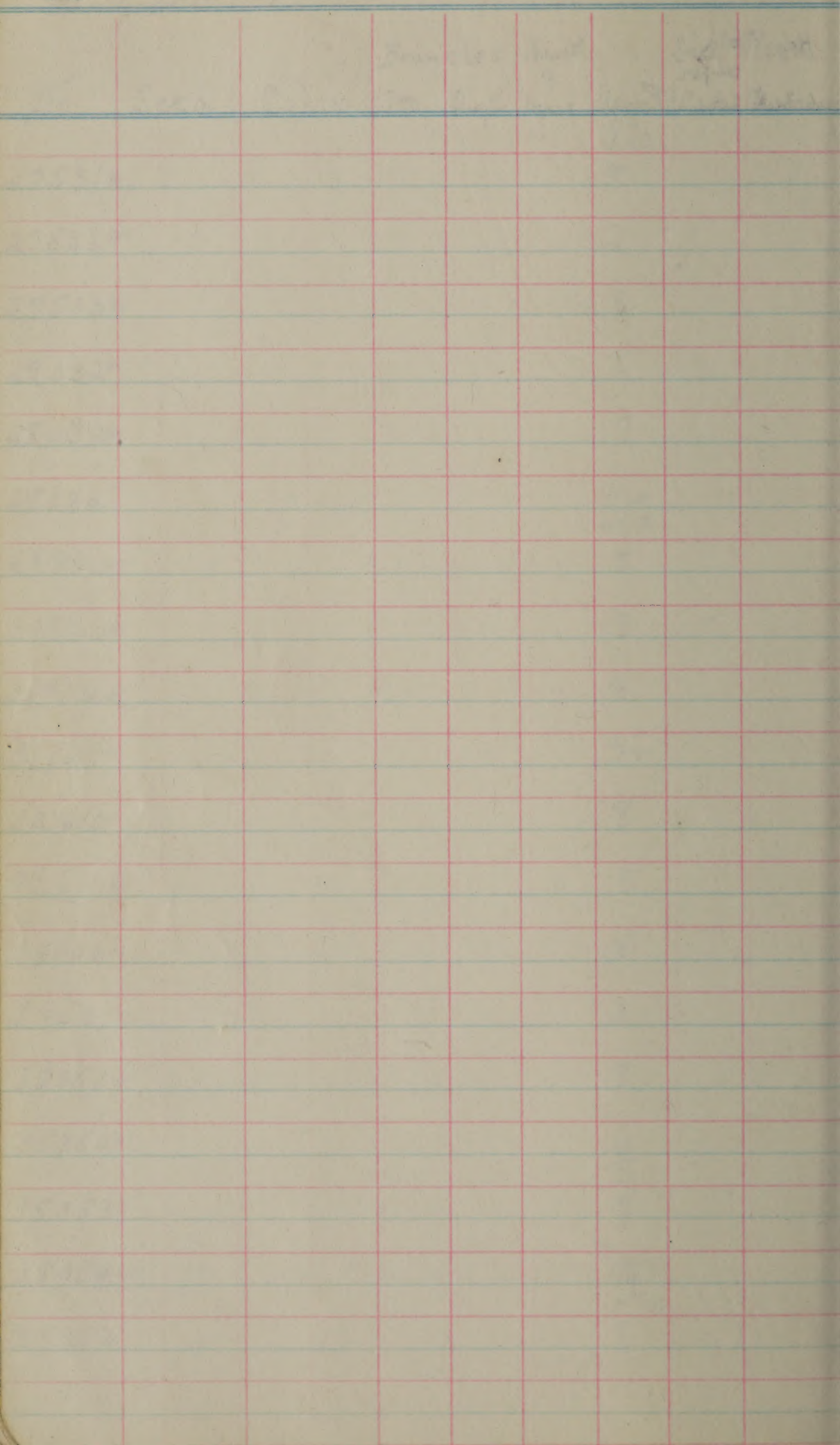
No.	Seed	Color	Sown	Row	Stand	Bloom		Habit
						Color	Date	
27531✓			6/18/13	7		W	8/5	
27532✓			6/18/13	20				
27533✓			6/18/13	32		P	8/5	
28032✓			6/18/13	8		W	8/27	
28032✓			6/18/13	1				
28032✓			6/18/13	1				
28032✓			6/18/13					
28736✓			6/18/13	25				
31363✓			6/18/13	24		W	9/2	
31716✓			6/18/13	33		P	9/15	
31729✓			6/18/13	12				
32610✓			6/18/13	9				
32611✓			6/18/13	21				
34106✓			6/18/13	10				
34501✓			6/18/13	34				
35351✓			6/18/13	11				
35352✓			6/18/13	12				
				13				
35353✓			6/18/13	23				
35354✓			6/18/13	22				
35352								

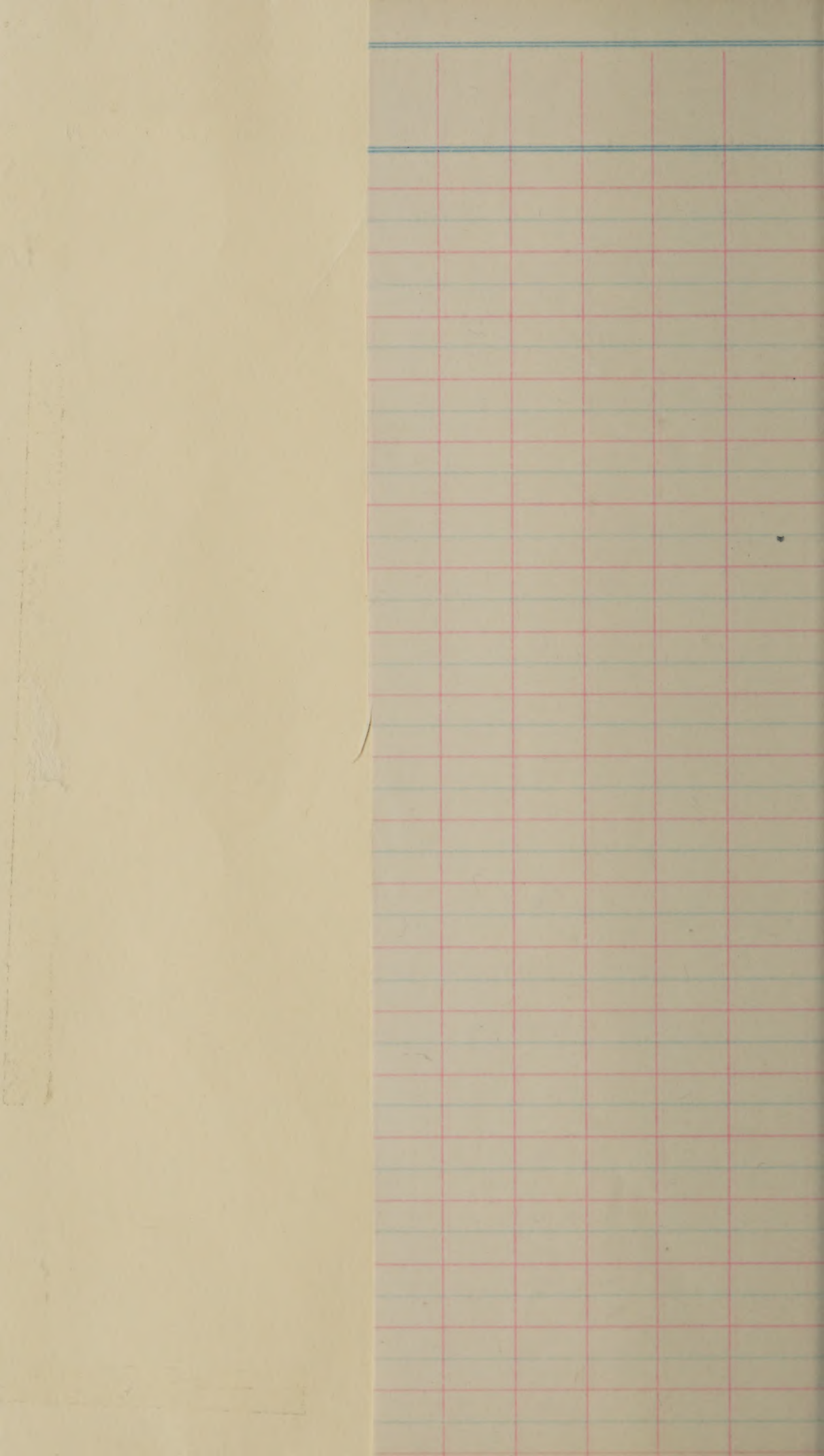
1st pods all
nodes
mature mature Season Color No. seed

Pods No. 6

Branches No.	Length	Breadth of mass	Seed Yield	
			Area Pds	Actual Cal. per acre
			8	
			2	
			8	
			8	
			7	
			1/20 acre	
			8	
			8	
			8	
			1/2	
			8	
			8	
			8	
			2	
			8	
			6	
			8	
			8	
			8	
			1 1/2	
			8	

Hay Yield
cal. per
actual acre Rank





2000-11-11

2000-11-11

2000-11-11

2000-11-11

2000-11-11

2000-11-11

2000-11-11

2000-11-11

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2000-11-11

2000-11-11

2000-11-11

2000-11-11

2000-11-11

2000-11-11

2000-11-11

2000-11-11

	Fl.	1st Ride picks
0		
01015		
01540	P	9/9
01544	P	9/4
01545	P	9/4
01546	P	9/20
01548	P	9/9
01549	W	9/4
01550	P	9/4
01551	P	9/20
01552	P	9/20
01571	W	9/9
01718	P	
01748	P	
01868	P	
01870	P	9/23
01871	P	9/23
01872	P	9/23
01890	P	
9246-1	P	
9246-2	P	
9246-3	P	

9

P-0458

9

2-0458

9

2-0458

P-0458

P-0458

P-0458

01-0458

11-0458

SP-1

20-12

25-12

33-12

33-12

43-12

9

44-12

998

50-12

50-12

11

60-12

73-12

P3374

9246-4

P

9246-5

P

9246-6

P

9246-7

9246-8

9246-9

9246-10

9246-11

21293

21295

21295

22888

22888

25786

P

26844

VPP 9/23

27502

27502

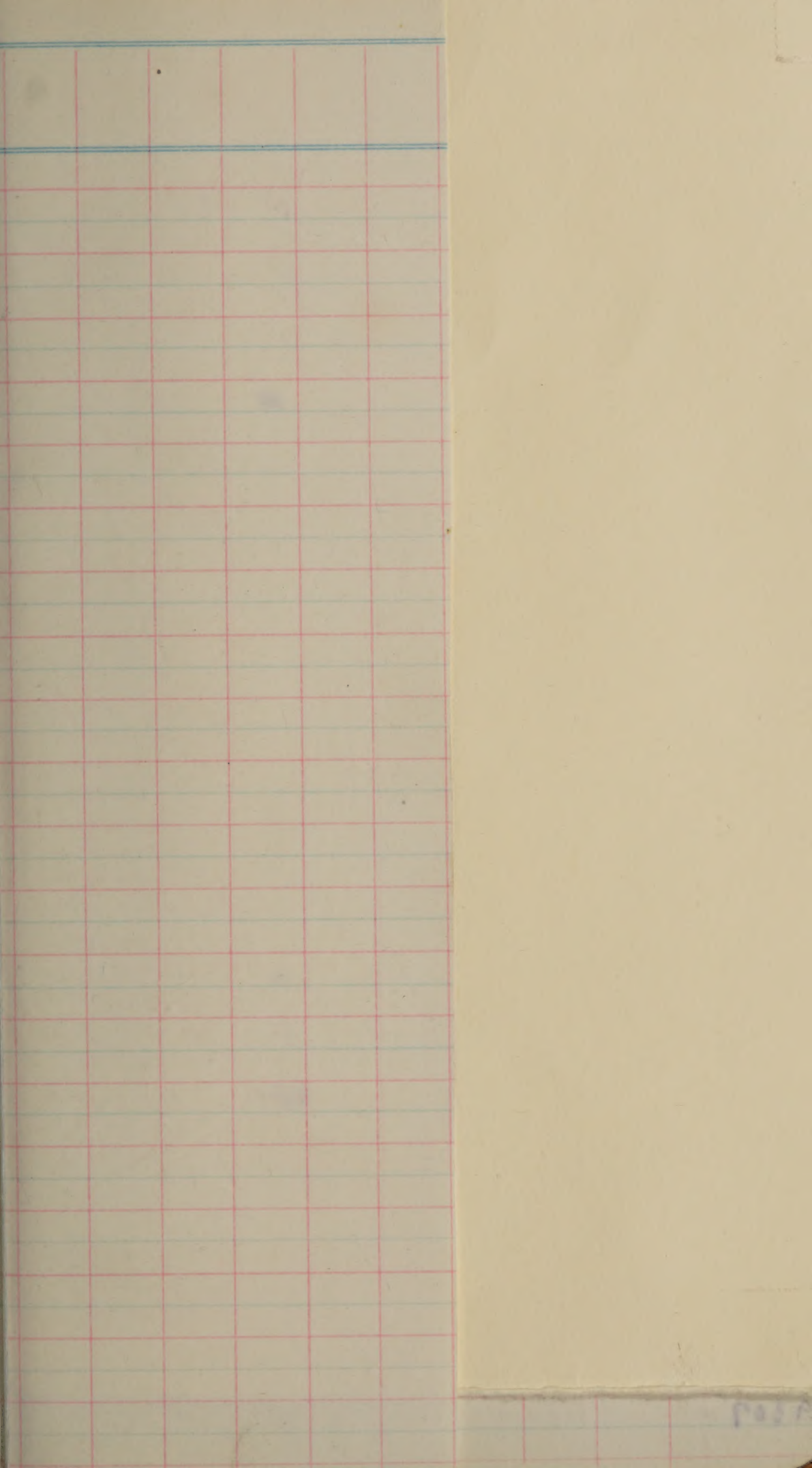
27930

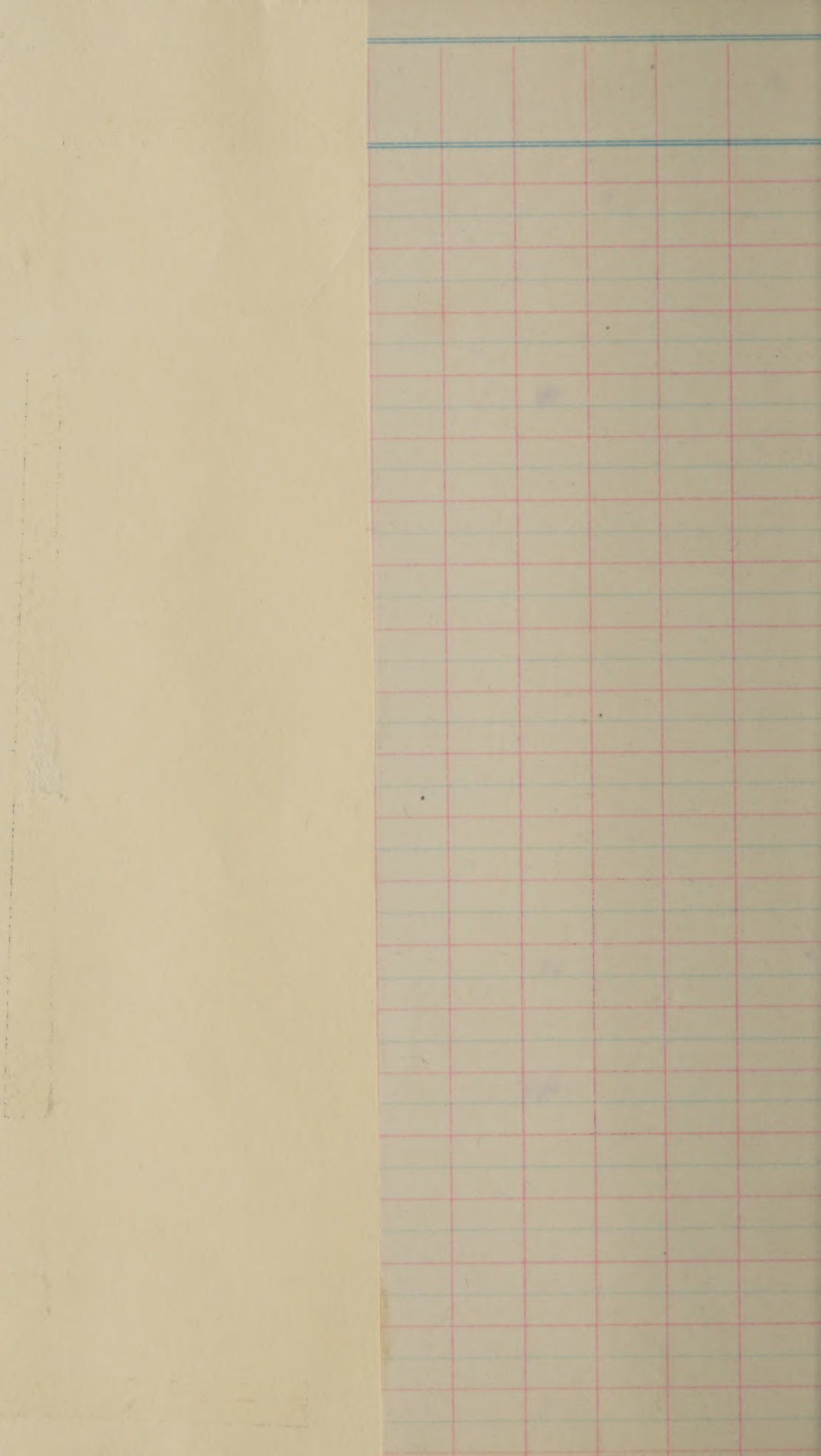
P 9/2

28888

VPP 9/20

28889





219

0937

A037

E037

W

F10P

99V

E05P

219

F02P

204P

205P

134P

A75P

A75P

A75P

219

474P

W

274P

9

274P

219

274P

P74P

A75P

219

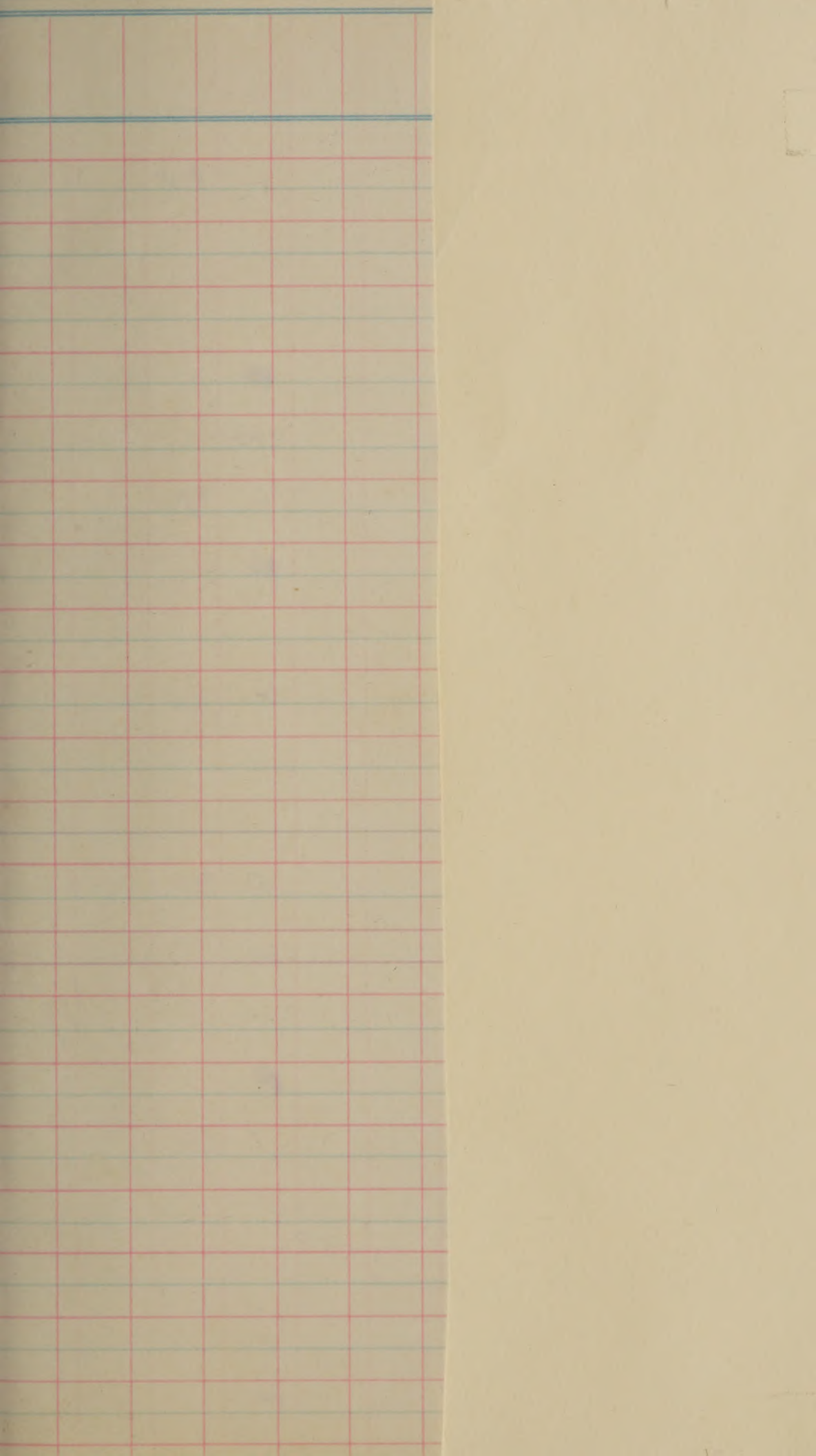
405P

9

P05P

Fl. ¹²⁰
Pods
Blor mature

28890	P	9/5
28892		
28893		
29014	W	
29262	VPP	
29267	P	9/2
29275		
29275		
29281	VPP	8/21
29282		
29282		
29283	P	9/9
29284	W	9/20
29285	P	9/23
29287	P	9/23
29288	P	9/2
29289	P	9/23
29292	P	
29304	VPP	9/2
29307	P	



711

5445

5445

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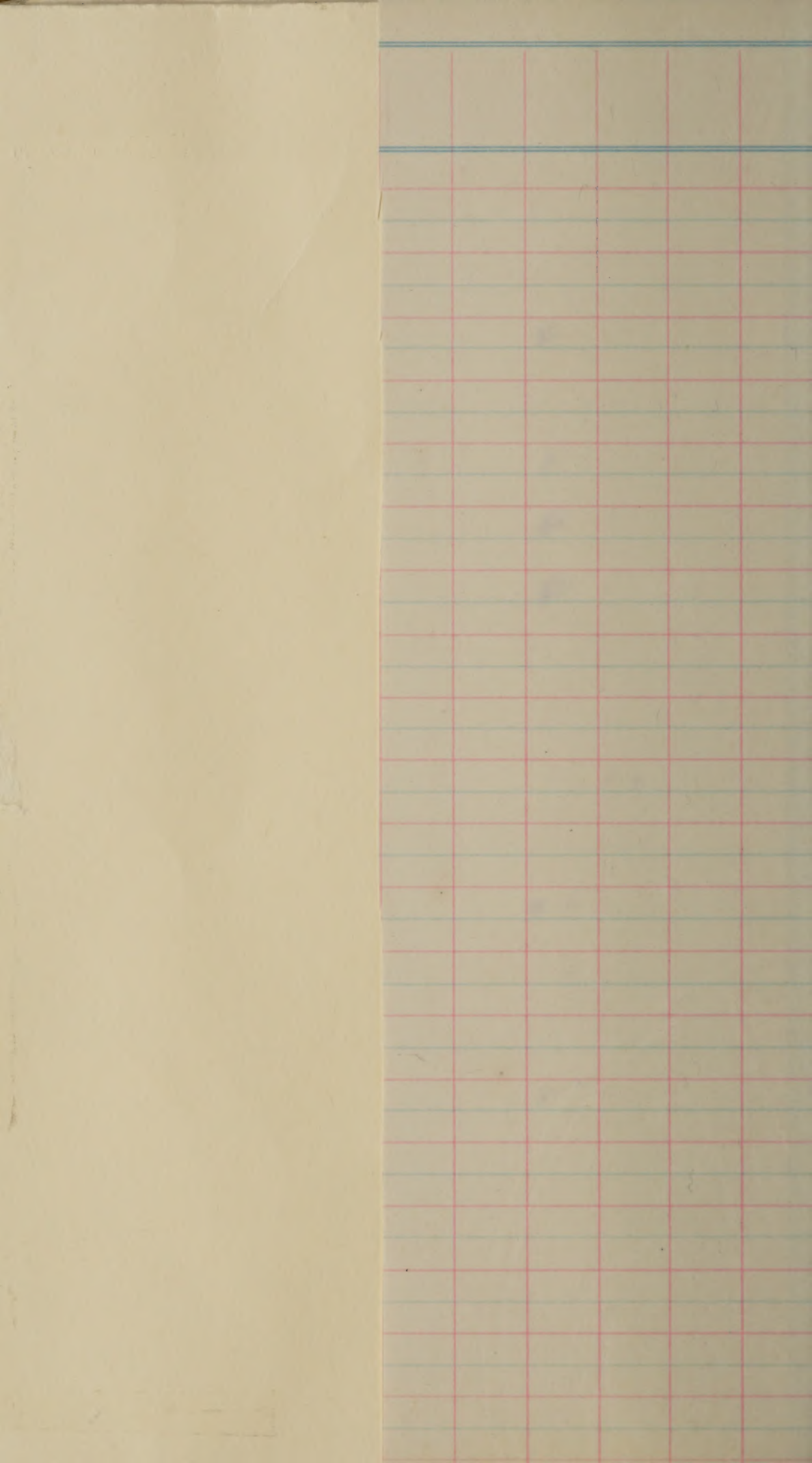
5445

9

5445

1st
 Pods
 Mature

30227	P	9/4
31799		
31799	P	9/20
31800	P	
31801	P	8/19
32623	P	8/27
32624	P	
32624-1	P	
32624-2	P	9/24
32624-3	P	
32625	P	9/4
32626	P	
32626-1		
32626-2		
32626-2	P	
32626-3	P ^{wp}	
32626-4	P	
32627	P	8/21
32628	P	8/27
32629		
32630-1	P	
32630-2	P	



9

1801

1-510-1

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1-510-2

9

~~1-510-3~~

9

1-510-4

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1-510-5

9

1-510-6

1-510-7

1-510-8

1-510-9

119

1-510-10

1-510-11

9-11

1-510-12

9-12

1-510-13

119

1-510-14

9

1-510-15

1-510-16

1-510-17

119

1-510-18

1-510-19

1-510-20

32631

P

32632-1

32632-2

P

32632-3

P

32633

P

32634

P 9/23

32634-4

P 9/9

3263

32635

32638

32639

VPP 9/4

32862

32612-1

W-P

32622-2

P.W

32659-1

P 9/9

32659-2

P

33440

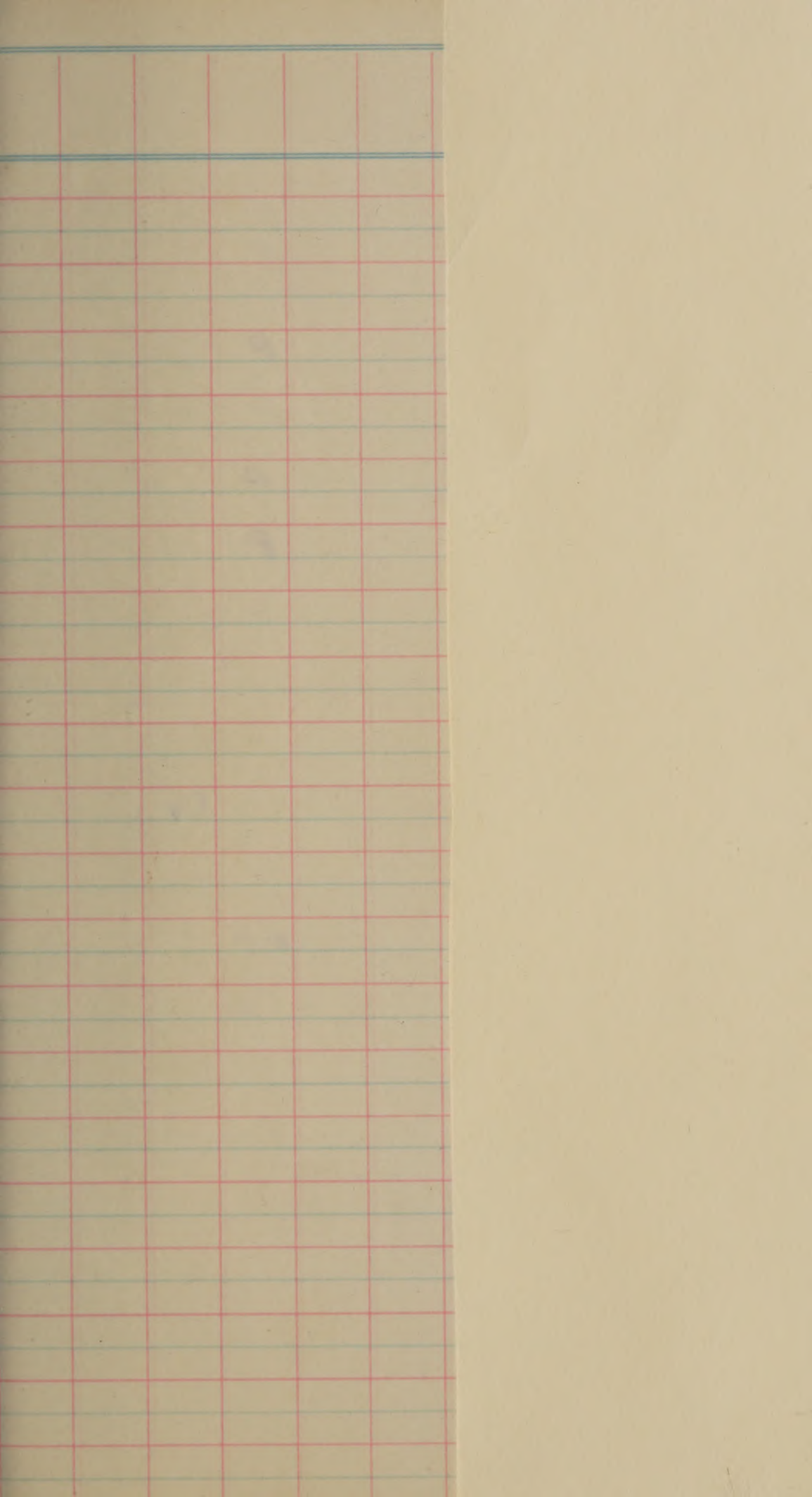
34859

34901

VPP 9/9

34902

34908





Soybean Selections

	Seed	Color	Sown	Mature	Fl.	Gl.	Pubescence	
					P	W	T	G
01593-1						+		
01593-2					+	x		
01593-3						+		
01762-1				9/23	x			
2				9/23	x			
3				9/23	x			
4				9/15	>			
5				9/15	x			
6				9/23		x		
7				9/15	x			
8				9/15	x			
08993						x		
5522-1-1						+		
-2					+	+		
-3						+		
5522-2-1						+		
-2						+		
-3						+		
-4						+		
-5						+		
5522-2-1'						+		
-2'						+		
-3'						+		
-4'						+		
5-1						+		
6'						+		
7'						+		
8'						+		
9'						+		
10'						+		
11					+	+		
5522-3-1						+		
-2						+		
-3						+		

Genus	Height	Mature
Gr. Y.		

O.Y. S.Y. Gr. Br. Bl. Bl. & Br.

J.Y. + Bz. S.Y. + Bz.

	Seed Color	Sown	Mature	Fl. Color		Pubescence	
				P	W	T	G
5522-4-1					+		
-2					+		
-3					+		
-4					+		
-5					+		
-6					+		
-7					+		
5522-5-1					+		
-2					+		
-3					+		
-4					+		
-5					+		
-6					+		
-7					+		
5522-6-1							
-2							
-3							
-4							
-5					+		
-6					+		
5522-7-1					+		
-7-2					+		
-7-3					+		
-7-4					+		
5522-7-1'					+		
5522-8-1				+	+		
-8-2					+		
5522-9-1					+		
-9-2					+		
-9-3					+		
5522-10-1					+		
-10-2					+		

Gen Height

G. Y

O.Y. S.Y. Gr. Br. Bl. Bl & Br

S.Y. + Br. S.Y. + Br.

	Seed color	Sown	Mature	Fl. color		Pubescence	
				P	W	T	G
5522-11-1					+		
-11-2					+		
-11-3					+		
-11-4					+		
-11-5					+		
5522-12-1					+		
-12-2					+		
-12-3					+		
-12-4					+		
-12-5					+		
-12-6					+		
5522-13-1					+		
-13-2					+		
-13-3					+		
5522-14-1					+		
-14-2					+		
-14-3					+		
-14-4				+	+		
-14-5					+		
-14-6					+		
-14-7				+	+		
-14-8					+		
19183-1	Black		10/4		x	+	
-2	"		10/4		x	+	
-3	"		10/4	x		x	
-4	"		10/6		+	+	
-5	"		10/4	+			+
-6	"		10/6		x	x	
-7	"		10/6	+			+
-8	"		10/6		x	x	
-9	"		10/6	+			+
22379-1				+			
-2			10/4	x			
-3				+	+		

Germ Height Season Pods. Uniform
 G Y

X	X	T	Yes
		T	"
	X	T	"
	X	T	"
	X	L	"
X		T	"
	X	D	"
	X	T	"
	X	Bl.	"

S.✓

S.Y.

O.Y.

Gr.

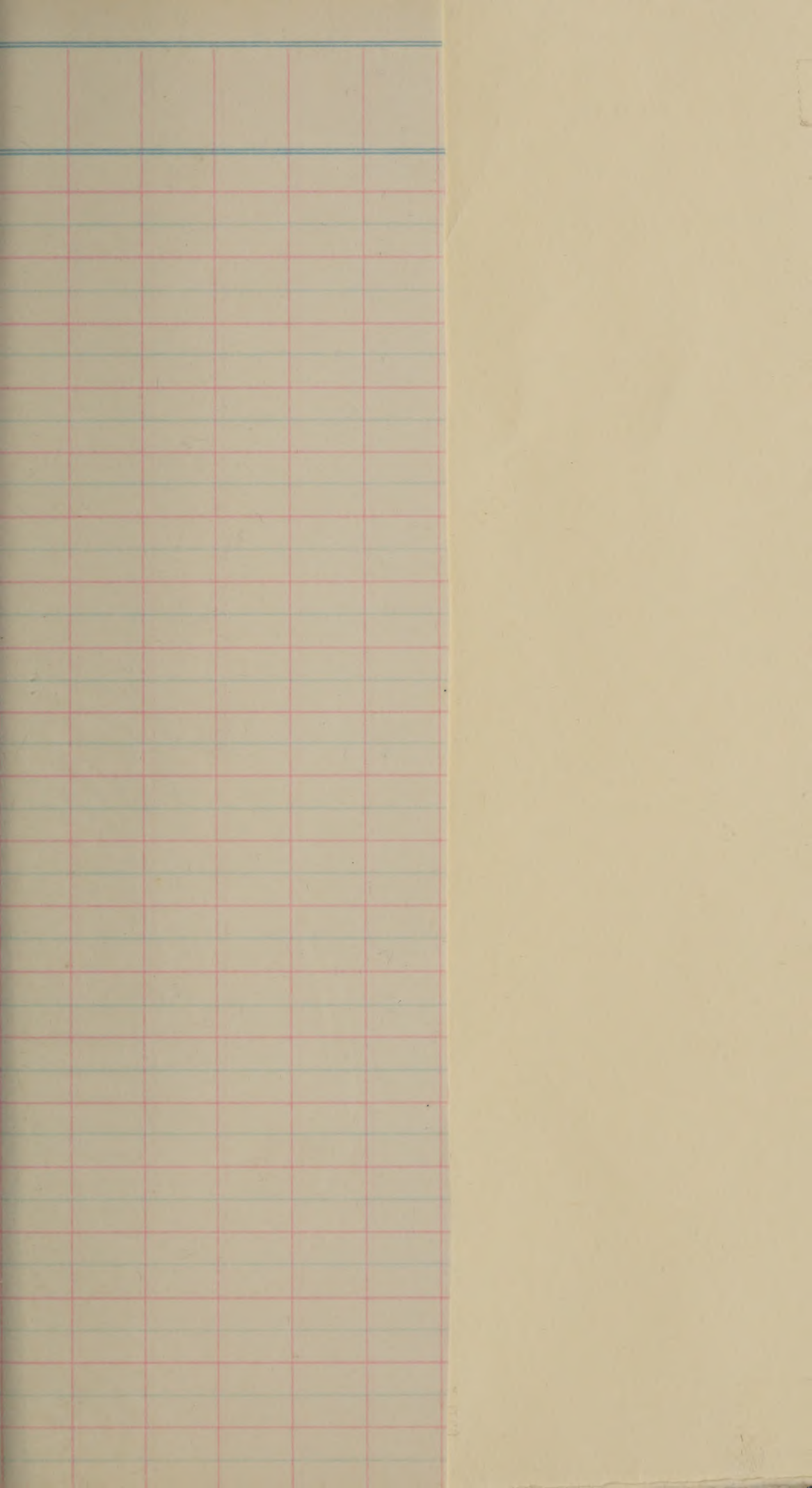
Pr.

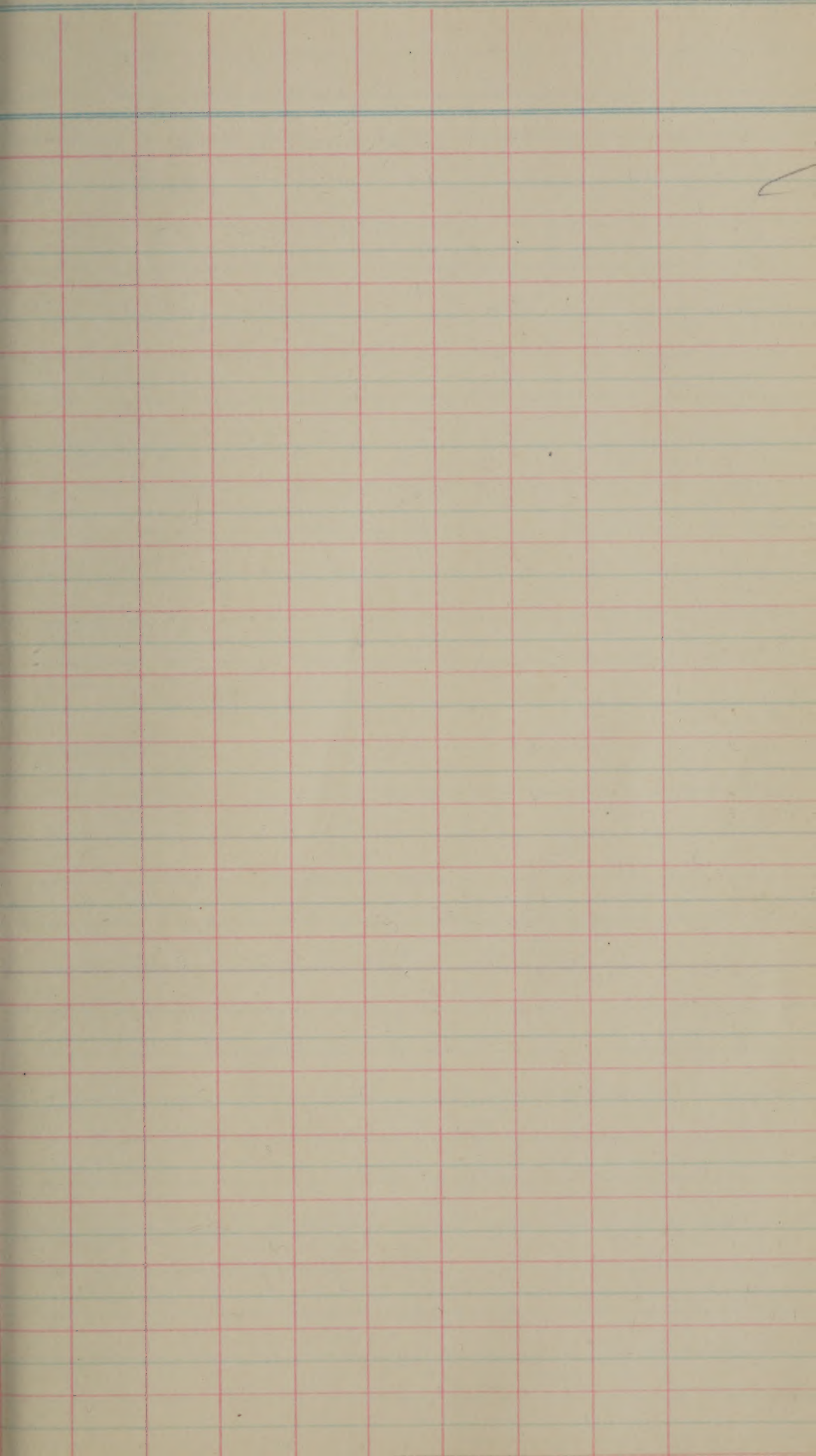
Bl.

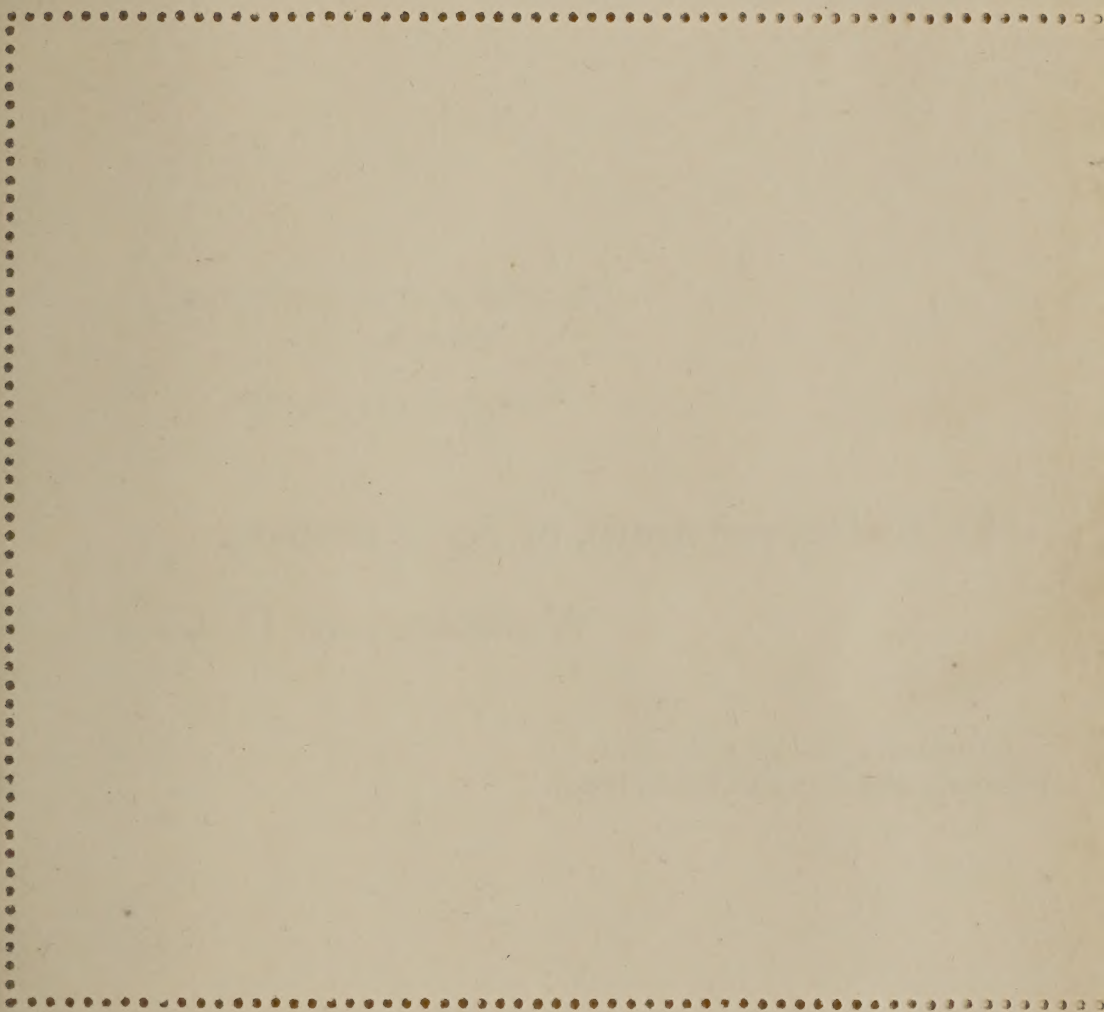
Bl. & Pr.

S.Y. + Br. S.Y. + Br.

looks like
Feb.







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